

1.3.3 NMFS Guidance on EFH Determination

The following is an excerpt from the interim final rule (December 1997):

The information obtained through the analysis of available EFH data will allow Councils to assess the relative value of habitats. Councils should interpret this information in a risk-averse fashion, to ensure that adequate areas are protected as EFH of managed species. Level 1 information, if available, should be used to identify the geographic range of the species. Level 2 through 4 information, if available, should be used to identify the habitats valued most highly within the geographic range of the species. If only Level 1 information is available, presence/absence data should be evaluated (e.g., using a frequency of occurrence or other appropriate analysis) to identify those habitat areas most commonly used by the species. Areas so identified should be considered essential for the species. However, habitats of intermediate and low value may also be essential, depending on the health of the fish population and the ecosystem. Councils must demonstrate that the best scientific information available was used in the identification of EFH, consistent with national standard 2, but other data may also be used for the identification.

If a species is overfished, and habitat loss or degradation may be contributing to the species being identified as overfished, all habitats currently used by the species should be considered essential in addition to certain historic habitats that are necessary to support rebuilding the fishery and for which restoration is technologically and economically feasible. Once the fishery is no longer considered overfished, the EFH identification should be reviewed, and the FMP amended, if appropriate.

EFH will always be greater than or equal to aquatic areas that have been identified as "critical habitat" for any managed species listed as threatened or endangered under the Endangered Species Act.

Where a stock of a species is considered to be healthy, then EFH for the species should be a subset of all existing habitat for the species. [NOTE: No species off Alaska is currently known to be overfished. For 42 rockfish species of very minor commercial and recreational importance (many listed are not harvested at all), the status is unknown. Source: "Report on the Status of Fisheries of the United States," NMFS Report to Congress, October 1997).]

Ecological relationships among species and between the species and their habitat require, where possible, that an ecosystem approach be used in determining the EFH of a managed species or species assemblage. The extent of the EFH should be based on the judgment of the Secretary and the appropriate Council(s) regarding the quantity and quality of habitat that is necessary to maintain a sustainable fishery and the managed species' contribution to a healthy ecosystem.

If degraded or inaccessible aquatic habitat has contributed to the reduced yields of a species or assemblage, and in the judgment of the Secretary and the appropriate Council(s), the degraded conditions can be reversed through such actions as improved fish passage techniques (for fish blockages), improved water quality or quantity measures (removal of contaminants or increasing flows), and similar measures that are technologically and economically feasible, then EFH should include those habitats that would be essential to the species to obtain increased yields.

1.3.4 Ecological Relationships

Ecological relationships among species and between the species and their habitat require, where possible, that an ecosystem approach be used in determining the EFH of a managed species or species assemblage. The extent of the EFH should be based on the judgment of the Secretary and the appropriate Council(s) regarding the quantity and quality of habitat that is necessary to maintain a sustainable fishery and the managed species' contribution to a healthy ecosystem. If degraded or inaccessible aquatic habitat has contributed to the reduced yields of a species or assemblage, and in the judgment of the Secretary and the appropriate Council(s), the degraded conditions can be reversed through such actions as improved fish passage techniques (for fish blockages), improved water quality or quantity measures (removal of contaminants or increasing flows), and similar measures that are technologically and economically feasible, then EFH should include those habitats that would be essential to the species to obtain increased yields.

Loss of prey is an adverse effect on EFH and a managed species, because one component of EFH is that it be necessary for feeding. Therefore, actions that significantly reduce the availability of a major prey species, either through direct harm or capture, or through adverse impacts to the prey species' habitat that are known to cause a reduction in the population of the prey species may be considered adverse effects on a managed species and its EFH. FMPs should identify the major prey species for the species in the FMU and generally describe the location of prey species' habitat. Actions that cause a reduction of the prey species population, including where there exists evidence that adverse effects to habitat of prey species is causing a decline in the availability of the prey species, should also be described and identified. Adverse effects on prey species and their habitats may result from fishing and non-fishing activities.

FMPs should identify habitat areas of particular concern within EFH. In determining whether a type, or area of EFH is a habitat area of particular concern, one or more of the following criteria must be met:

- (i) The importance of the ecological function provided by the habitat.
- (ii) The extent to which the habitat is sensitive to human-induced environmental degradation.
- (iii) Whether, and to what extent, development activities are, or will be, stressing the habitat type.
- (iv) The rarity of the habitat type.

1.3.5 EFH Distribution Maps

The guidelines specify that general distribution and geographic limits of EFH for each life history stage should be presented in FMPs in the form of maps. Ultimately, these data should be incorporated into a geographic information system (GIS) to facilitate analysis and presentation. These maps may be presented as fixed in time and space, but they should encompass all appropriate temporal and spatial variability in the distribution of EFH. If the geographic boundaries of EFH change seasonally, annually, or every decade, these changing distributions need to be represented in the maps. Different types of EFH should be identified on maps along with areas used by different life history stages of the species. The type of information used to identify EFH should be included in map legends, and more detailed and informative maps should be produced as more complete information about population responses (e.g., growth, survival, or reproductive rates) to habitat characteristics becomes available. Where the present distribution or stock size of a species or life history stage is different from the historical distribution or stock size, then maps of historical habitat boundaries should be included in the FMP, if known. The EFH

maps are a means to visually present the EFH described in the FMP. If the maps identifying EFH and the information in the description of EFH differ, the description is ultimately determinative of the limits of EFH, as stated in the interim final rule.

Maps for Alaska groundfish, salmon, scallops, and crab are included with the NMFS EFH recommendations in Section 6 of the EA.